

Chapter NR 257

ALUMINUM FORMING

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**NR 257.01 Purpose.** The purpose of this chapter is to establish effluent limitations, performance standards, and pretreatment standards for the discharge of process wastes from the aluminum forming point source category and its subcategories.

**History:** Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.02 Applicability.** (1) This chapter applies to any aluminum forming facility which discharges or may discharge pollutants to waters of the state or which introduces or may introduce pollutants into a publicly owned treatment works.

(2) This chapter applies to chemical or electrochemical treatments applied to the surface of the aluminum when these surface treatments are performed at aluminum forming site. When these surface treatments are not performed at the aluminum forming site, regulations for electroplating, ch. NR 260, or metal finishing, ch. NR 261, apply.

(3) This chapter applies to aluminum casting when the casting is performed as an integral part of aluminum forming and is located at the aluminum forming site. When aluminum forming is performed on the same site as primary aluminum reduction, this chapter applies if the aluminum cools prior to casting. If the aluminum does not cool prior to casting, the regulations for nonferrous metals manufacturing, ch. NR 274, apply.

**NR 257.03 General definitions.** In addition to the definitions set forth in ss. NR 205.03, 205.04, and 211.03, the following definitions apply to the terms used in this chapter:

(1) "Aluminum forming" means a set of manufacturing operations in which aluminum and aluminum alloys are made into semifinished products by hot or cold working, such as rolling, drawing, extruding, and forging, and related operations such as heat treatment and casting.

(2) "Ancillary operation" means a manufacturing operation that has a large flow, discharges significant amounts of pollutants, and may not be present at every plant in a subcategory but when present is an integral part of the aluminum forming process.

(3) "Cleaning or etching operation" means a chemical solution bath and rinse or series of rinses designed to produce a desired surface finish on the workpiece, including conversion coating and anodizing when performed as an integral part of the aluminum forming operations, and the air pollution scrubbers used to control fumes from the chemical solution baths.

(4) "Contact cooling water" means any wastewater which contacts the aluminum workpiece or the raw materials used in aluminum forming.

(5) "Continuous casting" means the production of sheet, rod, or other long shapes by solidifying the metal while it is being poured through an open ended mold using little or no contact cooling water.

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(6) "Degassing" means the removal of dissolved hydrogen from the molten aluminum prior to casting by adding chemicals and bubbling gases through the molten aluminum.

(7) "Direct chill casting" means an operation in which molten aluminum is poured into a water cooled mold, contact cooling water is sprayed onto the aluminum as the aluminum is dropped into the mold, and the aluminum ingot falls into a water bath at the end of the process.

(8) "Drawing" means the process of pulling metal through a die or succession of dies to reduce the metal's diameter or alter its shape, using either neat oils, emulsions, or soap solutions as a lubricant.

(9) "Emulsion" means a stable dispersion of 2 immiscible liquids, usually oil and water.

(10) "Existing source" means any point source from which pollutants may be discharged either directly into the waters of the state or into a POTW, except a new source as defined in sub. (18).

(11) "Extrusion" means the application of pressure to a billet of aluminum to force the aluminum to flow through a die orifice.

(12) "Forging" means the exertion of pressure on dies or rolls surrounding heated aluminum stock to force the stock to change shape and, when dies are used, to take the shape of the die.

(13) "Heat treatment" means the application of heat of specified temperature and duration to change the physical properties of the metal.

(14) "Hot water seal" means a water bath heated to approximately 180° F used to seal the surface coating on formed aluminum which has been anodized and coated.

(15) "lb/million off-lbs" means pounds of pollutant introduced into the wastestream per million pounds of aluminum or aluminum alloy removed from a forming or ancillary operation at the end of a process cycle for transfer to a different machine or process.

(16) "mg/off-kg" means milligrams of pollutant introduced into the wastestream per kilogram of aluminum or aluminum alloy removed from a forming or ancillary operation at the end of a process cycle for transfer to a different machine or process.

(17) "Neat oil" means an oil used as a lubricant with few or no added impurities.

(18) "New source" means any point source for which construction commenced after November 22, 1982 and from which pollutants may be discharged either directly into waters of the state or into a publicly owned treatment works.

(19) "Rolling" means the reduction in thickness or diameter of a workpiece by passing it between rollers lubricated with either neat oils or emulsions.

(20) "Stationary casting" means the pouring of molten aluminum into molds and allowing the metal to air cool.

(21) "TTO" means the sum of the masses or concentrations of each of the following toxic organic compounds which is found in the discharge at a concentration greater than 0.010 mg/l:

p-chloro-m-cresol	tetrachloroethylene
2-chlorophenol	toluene
2,4-dinitrotoluene	trichloroethylene
1,2-diphenylhydrazine	endosulfan sulfate
ethylbenzene	bis(2-ethyl hexyl) phthalate
fluoranthene	diethylphthalate
isophorone	3,4-benzofluoranthene
naphthalene	benzo(k)fluoranthene
N-nitrosodiphenylamine	chrysene
phenol	acenaphthylene
benzo(a)pyrene	anthracene
benzo(ghi)perylene	di-n-butyl phthalate
fluorene	endrin
phenanthrene	endrin aldehyde
dibenzo(a,h)anthracene	PCB-1242, 1254, 1221, 1232,
indeno(1,2,3-c,d)pyrene	1248, 1260, 1016
pyrene	acenaphthene

(22) "Wet scrubber" means an air pollution control device used to remove particulates and fumes from air by entraining the pollutants in a water spray.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.04 Monitoring and reporting requirements. The following special monitoring and reporting requirements apply to all facilities subject to this chapter:

(1) Analyses for cyanide are not required when both of the following conditions are met:

(a) The first wastewater sample of the calendar year has been analyzed and found to contain less than 0.07 mg/l.

(b) The owner or operator of the aluminum forming facility certifies in writing to the department or control authority that cyanide is not and will not be used in the aluminum forming process.

(2) As an alternative pretreatment monitoring procedure, the POTW user may measure and limit oil and grease to the levels shown in the pretreatment standards in lieu of measuring and regulating TTO.

(3) Compliance with the maximum monthly average effluent limitations and pretreatment standards is required regardless of the number of samples analyzed and averaged. The maximum monthly average effluent limitations and pretreatment standards shall be the basis for monthly average discharge limits in direct discharge permits and for pretreatment standards.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.05 Compliance dates. (1) Any existing source subject to this chapter which discharges to waters of the state shall achieve;

(a) the effluent limitations representing BPT by July 1, 1977; and

(b) the effluent limitations representing BAT by July 1, 1984.

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(2) Any new source subject to this chapter which discharges to waters of the state shall achieve NSPS at the commencement of discharge.

(3) Any existing source subject to this chapter which discharges process wastewater pollutants to a POTW shall achieve PSES by October 24, 1986.

(4) Any new source subject to this chapter which discharges process wastewater pollutants to a POTW shall achieve PSNS at the commencement of discharge.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.06 Removal allowances for pretreatment standards.** Removal allowances for pretreatment standards pursuant to s. NR 211.13 may be granted for the toxic metals limited by this chapter when the toxic metals are used as indicator pollutants.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

### Subchapter I — Rolling With Neat Oils Subcategory

**NR 257.10 Applicability; description of the rolling with neat oils subcategory.** This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary rolling with neat oils operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.11 Specialized definitions.** In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the rolling operation, such as continuous rod casting, continuous sheet casting, solution heat treatment, and cleaning or etching.

(2) "Core operation" means rolling using neat oils, roll grinding, sawing, annealing, stationary casting, homogenizing, artificial aging, degreasing, and stamping.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.12 Effluent limitations representing the degree of effluent limitations attainable by application of the best practicable control technology currently available.** Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

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**Table 1**  
**Core with an annealing furnace scrubber**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.0360	0.0147
Cyanide	0.0237	0.0098
Zinc	0.119	0.0498
Aluminum	0.525	0.257
Oil and grease	1.634	0.980
Suspended solids	3.348	1.593
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 2**  
**Core without an annealing furnace scrubber**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.0244	0.010
Cyanide	0.0161	0.0067
Zinc	0.0808	0.0338
Aluminum	0.356	0.174
Oil and grease	1.11	0.664
Suspended solids	2.27	1.079
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 3**  
**Continuous sheet casting spent lubricant**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum sheet cast by continuous methods	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.0029	0.0012
Aluminum	0.0127	0.0063
Oil and grease	0.0393	0.0236
Suspended solids	0.805	0.0383
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 4**  
**Solution heat treatment contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	160.25
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 5**  
**Cleaning or etching bath**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.110
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 6**  
**Cleaning or etching rinse and hot water seal**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.52
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 7**  
**Cleaning or etching scrubber liquor**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.13 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

**Table 8**  
**Core with an annealing furnace scrubber**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.036	0.015
Cyanide	0.024	0.0098
Zinc	0.119	0.050
Aluminum	0.525	0.257

**Table 9**  
**Core without an annealing furnace scrubber**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.025	0.010
Cyanide	0.016	0.0067
Zinc	0.081	0.034
Aluminum	0.356	0.174

**Table 10**  
**Continuous sheet casting spent lubricant**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum sheet cast	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.00287	0.0012
Aluminum	0.0127	0.0062

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**Table 11**  
**Solution heat treatment contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.897	0.367
Cyanide	0.591	0.245
Zinc	2.974	1.243
Aluminum	13.10	6.518

**Table 12**  
**Cleaning or etching bath**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.151	0.573

**Table 13**  
**Cleaning or etching rinse and hot water seal**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.167
Zinc	2.031	0.849
Aluminum	8.944	4.450

**Table 14**  
**Cleaning or etching scrubber liquor**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.348
Cyanide	0.561	0.232
Zinc	2.822	1.179
Aluminum	12.43	6.186

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.14 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

**Table 15**  
**Core with an annealing furnace scrubber**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.030	0.0123
Cyanide	0.016	0.0065
Zinc	0.084	0.0343
Aluminum	0.499	0.221
Oil and grease	0.817	0.817
Suspended solids	1.225	0.980
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 16**  
**Core without an annealing furnace scrubber**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.021	0.0083
Cyanide	0.011	0.0044
Zinc	0.057	0.023
Aluminum	0.333	0.150
Oil and grease	0.553	0.553
Suspended solids	0.830	0.664
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 17**  
**Continuous sheet casting spent lubricant**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.00073	0.00029
Cyanide	0.00039	0.00016
Zinc	0.0020	0.00082
Aluminum	0.012	0.0053
Oil and grease	0.0197	0.019
Suspended solids	0.0295	0.022
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 18**  
**Solution heat treatment contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.66	24.46
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 19**  
**Cleaning or etching bath**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 20**  
**Cleaning or etching rinse and hot water seal**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.70
Oil and grease	13.91	13.91
Suspended solids	20.87	16.69
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 21**  
**Cleaning or etching scrubber liquor**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.715	0.29
Cyanide	0.387	0.16
Zinc	1.97	0.81
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.15 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

**Table 22**  
**Core with an annealing furnace scrubber**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.036	0.015
Cyanide	0.024	0.010
Zinc	0.119	0.050
TTO	0.057	
Oil and grease (alternate monitoring parameter)	4.30	2.10

**Table 23**  
**Core without an annealing furnace scrubber**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.025	0.010
Cyanide	0.016	0.007
Zinc	0.081	0.034
TTO	0.038	
Oil and grease (alternate monitoring parameter)	2.90	1.50

**Table 24**  
**Continuous sheet casting lubricant**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.0029	0.0012
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.100	0.052

**Table 25**  
**Solution heat treatment contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.69	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 26**  
**Cleaning or etching bath**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.0032
Cyanide	0.052	0.022
Zinc	0.262	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

**Table 27**  
**Cleaning or etching rinse and hot water seal**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.61	0.25
Cyanide	0.41	0.17
Zinc	2.03	0.85
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

**Table 28**  
**Cleaning or etching scrubber liquor**  
**PSSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.16 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

**Table 29**  
**Core with an annealing furnace scrubber**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with neat oils	
Chromium	0.030	0.013
Cyanide	0.017	0.007
Zinc	0.084	0.035
TTO	0.057	
Oil and grease (alternate monitoring parameter)	0.817	0.817

**Table 30**  
**Core without an annealing furnace scrubber**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum with neat oils	
Chromium	0.021	0.009
Cyanide	0.011	0.005
Zinc	0.057	0.024
TTO	0.038	
Oil and grease (alternate monitoring parameter)	0.54	0.54

**Table 31**  
**Continuous sheet casting lubricant**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.00073	0.00029
Cyanide	0.00039	0.00016
Zinc	0.0020	0.00082
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.020	0.020

**Table 32**  
**Solution heat treatment contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

**Table 33**  
**Cleaning or etching bath**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

**Table 34**  
**Cleaning or etching rinse and hot water seal**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

**Table 35**  
**Cleaning or etching scrubber liquor**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**Subchapter II — The Rolling With Emulsions Subcategory**

**NR 257.20 Applicability;** description of the rolling with emulsions subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary rolling with emulsions operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.21 Specialized definitions.** In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the rolling operation, such as direct chill casting, solution heat treatment, cleaning or etching, and degassing.

(2) "Core operation" means rolling using emulsions, roll grinding, stationary casting, homogenizing, artificial aging, annealing, and sawing.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.22 Effluent limitations representing the degree of effluent limitations attainable by application of the best practicable control technology currently available.** Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

**Table 36**  
**Core operation**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.057	0.024
Cyanide	0.038	0.016
Zinc	0.19	0.079
Aluminum	0.84	0.416
Oil and grease	2.60	1.56
Suspended solids	5.33	2.53
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 37**  
**Direct chill casting contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26
Oil and grease	26.58	15.95
Suspended solids	54.49	25.92
pH	(1)	(1)

<sup>1</sup> The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

**Table 38**  
**Solution heat treatment contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	0.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 39**  
**Cleaning or etching bath**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 40**  
**Cleaning or etching rinse and hot water seal**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.52
Oil and grease	278.24	166.95
Suspended solids	670.39	271.29
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 41**  
**Cleaning or etching scrubber liquor**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.23 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable.** Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

**Table 42**  
**Core operation**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.057	0.024
Cyanide	0.038	0.016
Zinc	0.19	0.079
Aluminum	0.84	0.42

**Table 43**  
**Direct chill casting contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26

**Table 44**  
**Solution heat treatment contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
Aluminum	13.10	6.52

**Table 45**  
**Cleaning or etching bath**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.109
Aluminum	1.15	0.573

**Table 46**  
**Cleaning or etching rinse and hot water seal**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.61	0.25
Cyanide	0.41	0.17
Zinc	2.03	0.85
Aluminum	8.95	4.45

**Table 47**  
**Cleaning or etching scrubber liquor**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.24 New source performance standards.** Any new source subject to this subchapter shall achieve the following performance standards:

**Table 48**  
**Core operation**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.048	0.020
Cyanide	0.026	0.011
Zinc	0.133	0.055
Aluminum	0.80	0.35
Oil and grease	1.30	1.30
Suspended solids	1.95	1.56
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 49**  
**Direct chill casting contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by continuous methods	
Chromium	0.49	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
Aluminum	8.12	3.60
Oil and grease	13.29	13.29
Suspended solids	19.94	15.95
pH	(1)	(1)

<sup>1</sup> The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

**Table 50**  
**Solution heat treatment contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.46
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 51**  
**Cleaning or etching bath**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 52**  
**Cleaning or etching rinse and hot water seal**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 53**  
**Cleaning or etching scrubber liquor**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.25 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

**Table 54**  
**Core operation**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.057	0.024
Cyanide	0.038	0.016
Zinc	0.190	0.079
TTO	0.090	
Oil and grease (alternate monitoring parameter)	6.80	3.40

**Table 55**  
**Direct chill casting contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by semicontinuous methods	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
TTO	0.92	
Oil and grease (alternate monitoring parameter)	69.0	35.0

**Table 56**  
**Solution heat treatment contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 57**  
**Cleaning or etching bath**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

**Table 58**  
**Cleaning or etching rinse and hot water seal**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.61	0.25
Cyanide	0.41	0.17
Zinc	2.03	0.85
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

**Table 59**  
**Cleaning or etching scrubber liquor**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.83	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.26 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which in-**

roduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

**Table 60**  
**Core operation**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rolled with emulsions	
Chromium	0.048	0.020
Cyanide	0.026	0.011
Zinc	0.133	0.055
TTO	0.090	
Oil and grease (alternate monitoring parameter)	1.30	1.30

**Table 61**  
**Direct chill casting contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by semicontinuous methods	
Chromium	0.49	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
TTO	0.92	
Oil and grease (alternate monitoring parameter)	13.29	13.29

**Table 62**  
**Solution heat treatment contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

**Table 63**  
**Cleaning or etching bath**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

**Table 64**  
**Cleaning or etching rinse and hot water seal**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

**Table 65**  
**Cleaning or etching scrubber liquor**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

### Subchapter III — The Extrusion Subcategory

**NR 257.30 Applicability;** description of the extrusion subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary extrusion operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.31 Specialized definitions.** In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the extrusion operation, such as direct chill casting, press or solution heat treatment, cleaning or etching, degassing, and extrusion press hydraulic fluid leakage.

(2) "Core operation" means extrusion die cleaning, any wet scrubber associated with the die cleaning, dummy block cooling, stationary casting, artificial aging, annealing, degreasing, and sawing.

(3) "Extrusion die cleaning" means an operation in which the steel dies used for aluminum extrusion are cleaned by dipping the dies into a concentrated caustic bath to dissolve the aluminum and then rinsing the dies with water.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.32 Effluent limitations** representing the degree of effluent limitations attainable by application of the best practicable control technology cur-

Register, November, 1989, No. 407

rently available. Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

**Table 66**  
**Core operation**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.16	0.066
Cyanide	0.11	0.044
Zinc	0.53	0.22
Aluminum	2.34	1.16
Oil and grease	7.32	4.39
Suspended solids	15.00	7.18
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 67**  
**Extrusion press leakage**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.65	0.27
Cyanide	0.43	0.18
Zinc	2.16	0.90
Aluminum	9.51	4.73
Oil and grease	29.56	17.74
Suspended solids	60.60	28.82
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 68**  
**Direct chill casting contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26
Oil and grease	26.58	15.95
Suspended solids	54.49	25.92
pH	(1)	(1)

<sup>1</sup> The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

**Table 69**  
**Press heat treatment contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 70**  
**Solution heat treatment contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 71**  
**Cleaning or etching bath**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.109
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 72**  
**Cleaning or etching rinse and hot water seal**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.52
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 73**  
**Cleaning or etching scrubber liquor**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 74**  
**Degassing scrubber liquor**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum degassed	
Chromium	1.16	0.47
Cyanide	0.76	0.32
Zinc	3.81	1.59
Aluminum	16.78	8.35
Oil and grease	52.18	31.31
Suspended solids	106.97	50.88
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.33 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT. Degassing operations may not discharge wastewater pollutants.

**Table 75**  
**Core operation**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
Aluminum	25.0	13.0

**Table 76**  
**Extrusion press leakage**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.65	0.27
Cyanide	0.43	0.18
Zinc	2.16	0.90
Aluminum	9.51	4.73

**Table 77**  
**Direct chill casting contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
Aluminum	8.55	4.26

**Table 78**  
**Press heat treatment contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
Aluminum	13.10	6.52

**Table 79**  
**Solution heat treatment contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
Aluminum	13.10	6.52

**Table 80**  
**Cleaning or etching bath**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.15	0.58

**Table 81**  
**Cleaning or etching rinse and hot water seal**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
Aluminum	25.0	13.0

**Table 82**  
**Cleaning or etching scrubber liquor**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.34 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards. Degassing operations may not discharge wastewater pollutants.

**Table 83**  
**Core operation**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.13	0.051
Cyanide	0.068	0.027
Zinc	0.35	0.14
Aluminum	2.07	0.92
Oil and grease	3.39	3.39
Suspended solids	5.10	4.07
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 84**  
Extrusion press leakage  
NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.11	0.045
Cyanide	0.060	0.024
Zinc	0.31	0.126
Aluminum	1.82	0.81
Oil and grease	2.98	2.98
Suspended solids	4.47	3.58
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 85**  
Direct chill casting contact cooling water  
NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast by semicontinuous methods	
Chromium	0.49	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
Aluminum	8.12	3.60
Oil and grease	13.29	13.29
Suspended solids	19.94	15.95
pH	(1)	(1)

<sup>1</sup> The pH shall be maintained within the range of 7.0 to 10.0 at all times, except for those situations when this waste stream is discharged separately and without commingling with any other wastewater, in which case the pH shall be within the range of 6.0 to 10.0 at all times.

**Table 86**  
Press heat treatment contact cooling water  
NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 87**  
**Solution heat treatment contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 88**  
**Cleaning or etching bath**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.076
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 89**  
**Cleaning or etching rinse and hot water seal**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 90**  
**Cleaning or etching scrubber liquor**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.35 Pretreatment standards for existing sources.** Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources. Degassing operations may not discharge wastewater pollutants.

**Table 91**  
**Core operation**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.15	0.061
Cyanide	0.098	0.041
Zinc	0.49	0.21
TTO	0.23	
Oil and grease (alternate monitoring parameter)	18.0	8.8

**Table 92**  
**Extrusion press leakage**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.65	0.27
Cyanide	0.43	0.18
Zinc	2.16	0.90
TTO	1.02	
Oil and grease (alternate monitoring parameter)	77.0	39.0

**Table 93**  
**Direct chill casting contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.59	0.24
Cyanide	0.39	0.16
Zinc	1.94	0.81
TTO	0.92	
Oil and grease (alternate monitoring parameter)	69.0	35.0

**Table 94**  
**Press heat treatment contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 95**  
**Solution heat treatment contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.90	0.37
Cyanide	0.59	0.25
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 96**  
**Cleaning or etching bath**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

**Table 97**  
**Cleaning or etching rinse and hot water seal**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
TTO	2.7	
Oil and grease (alternate monitoring parameter)	200.0	100.0

**Table 98**  
**Cleaning or etching scrubber liquor**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.35
Cyanide	0.56	0.23
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.36 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources. Degassing operations may not discharge wastewater pollutants.

**Table 99**  
**Core operation**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.13	0.05
Cyanide	0.07	0.03
Zinc	0.35	0.15
TTO	0.24	
Oil and grease (alternate monitoring parameter)	3.40	3.40

**Table 100**  
**Extrusion press leakage**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum extruded	
Chromium	0.11	0.05
Cyanide	0.06	0.03
Zinc	0.31	0.13
TTO	0.21	
Oil and grease (alternate monitoring parameter)	2.98	2.98

**Table 101**  
**Direct chill casting contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.49	0.20
Cyanide	0.27	0.11
Zinc	1.36	0.56
TTO	0.92	
Oil and grease (alternate monitoring parameter)	13.29	13.29

**Table 102**  
**Press heat treatment contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

**Table 103**  
**Solution heat treatment contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.17
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

**Table 104**  
**Cleaning or etching bath**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.087	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

**Table 105**  
**Cleaning or etching rinse and hot water seal**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

**Table 106**  
**Cleaning or etching scrubber liquor**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.81
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

#### **Subchapter IV — The Forging Subcategory**

**NR 257.40 Applicability; description of the forging subcategory.** This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary forging operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.41 Specialized definitions.** In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the forging operation, such as forging air pollution scrubbers, solution heat treatment, cleaning or etching.

(2) "Core operation" means forging, artificial aging, annealing, degreasing, and sawing.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.44 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

**Table 107**  
**Core operation**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.019	0.008
Cyanide	0.010	0.004
Zinc	0.051	0.021
Aluminum	0.305	0.135
Oil and grease	0.50	0.50
Suspended solids	0.75	0.60
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 108**  
**Forging scrubber liquor**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.035	0.014
Cyanide	0.019	0.008
Zinc	0.096	0.04
Aluminum	0.576	0.256
Oil and grease	0.943	0.95
Suspended solids	1.42	1.18
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 109**  
**Solution heat treatment contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.163
Zinc	2.08	0.86
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 110**  
**Cleaning or etching bath**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 111**  
**Cleaning or etching rinse and hot water seal**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.62	0.21
Cyanide	0.23	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.69
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 112**  
**Cleaning or etching scrubber liquor**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.155
Zinc	1.97	0.812
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.45 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. 211 and achieve the following pretreatment standards for existing sources:

**Table 113**  
**Core operation**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.022	0.009
Cyanide	0.015	0.006
Zinc	0.073	0.031
TTO	0.035	
Oil and grease (alternate monitoring parameter)	2.6	1.3

**Table 114**  
**Forging scrubber liquor**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.042	0.017
Cyanide	0.028	0.011
Zinc	0.140	0.058
TTO	0.065	
Oil and grease (alternate monitoring parameter)	4.9	2.5

**Table 115**  
**Solution heat treatment contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.897	0.37
Cyanide	0.591	0.25
Zinc	2.98	1.24
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 116**  
**Cleaning or etching bath**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.11
TTO	0.123	
Oil and grease (alternate monitoring parameter)	3.30	4.70

**Table 117**  
**Cleaning or etching rinse and hot water seal**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	1.7	0.7
Cyanide	1.2	0.5
Zinc	5.7	2.4
TTO	2.7	
Oil and grease (alternate monitoring parameter)	200.0	100.0

**Table 118**  
**Cleaning or etching scrubber liquor**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.35
Cyanide	0.561	0.23
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.46 Pretreatment standards for new sources. Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

**Table 119**  
**Core operation**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.019	0.008
Cyanide	0.010	0.004
Zinc	0.051	0.021
TTO	0.035	
Oil and grease (alternate monitoring parameter)	0.50	0.50

**Table 120**  
**Forging scrubber liquor**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum forged	
Chromium	0.035	0.014
Cyanide	0.019	0.008
Zinc	0.096	0.040
TTO	0.065	
Oil and grease (alternate monitoring parameter)	0.95	0.95

**Table 121**  
**Solution heat treatment contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.31
Cyanide	0.41	0.16
Zinc	2.08	0.86
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

**Table 122**  
**Cleaning or etching bath**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

**Table 123**  
**Cleaning or etching rinse and hot water seal**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

**Table 124**  
**Cleaning or etching scrubber liquor**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.812
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**Subchapter V — The Drawing With Neat Oils Subcategory**

**NR 257.50 Applicability; description of the drawing with neat oils subcategory.** This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary drawing with neat oils operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.51 Specialized definitions.** In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the drawing operation, such as continuous rod casting, solution heat treatment, and cleaning or etching.

(2) "Core operation" means drawing with neat oils, stationary casting, artificial aging, annealing, degreasing, sawing, and swaging.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.52 Effluent limitations representing the degree of effluent limitations attainable by application of the best practicable control technology currently available.** Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

**Table 125**  
**Core operation**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.022	0.0090
Cyanide	0.015	0.0050
Zinc	0.073	0.031
Aluminum		
Oil and grease	0.97	0.598
Suspended solids	2.04	0.972
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 126**  
**Continuous rod casting spent lubricant**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.00086	0.00035
Cyanide	0.00057	0.00024
Zinc	0.00287	0.0012
Aluminum	0.0127	0.0063
Oil and grease	0.0393	0.0236
Suspended solids	0.0805	0.0383
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 127**  
**Continuous rod casting contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.684	0.28
Cyanide	0.451	0.187
Zinc	2.271	0.949
Aluminum	10.00	4.976
Oil and grease	31.10	18.66
Suspended solids	63.76	30.322
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 128**  
**Solution heat treatment contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 129**  
**Cleaning or etching bath**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.26	0.11
Aluminum	1.150	0.57
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 130**  
**Cleaning or etching rinse and hot water seal**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.40	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.62
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 131**  
**Cleaning or etching scrubber liquor**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	318.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.53 Effluent limitations representing the degree of effluent reduction attainable by the application of the best available technology economically achievable. Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

**Table 132**  
**Core operation**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.022	0.009
Cyanide	0.015	0.006
Zinc	0.073	0.031
Aluminum	0.321	0.16

**Table 133**  
**Continuous rod casting spent lubricant**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.00086	0.0004
Cyanide	0.0006	0.0002
Zinc	0.0029	0.0012
Aluminum	0.0127	0.0063

**Table 134**  
**Continuous rod casting contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.035
Cyanide	0.056	0.024
Zinc	0.283	0.118
Aluminum	1.247	0.621

**Table 135**  
**Solution heat treatment contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.896	0.367
Cyanide	0.591	0.245
Zinc	2.974	1.243
Aluminum	13.10	6.519

**Table 136**  
**Cleaning or etching bath**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.151	0.563

**Table 137**  
**Cleaning or etching rinse and hot water seal**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.512	0.251
Cyanide	0.404	0.167
Zinc	2.031	0.849
Aluminum	8.944	4.451

**Table 138**  
**Cleaning or etching scrubber liquor**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.348
Cyanide	0.561	0.232
Zinc	2.32	1.179
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.54 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

**Table 139**  
**Core operation**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.019	0.008
Cyanide	0.010	0.004
Zinc	0.051	0.021
Aluminum	0.304	0.135
Oil and grease	0.498	0.498
Suspended solids	0.747	0.598
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 140**  
**Continuous rod casting spent lubricant**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0008	0.0003
Cyanide	0.0004	0.0002
Zinc	0.002	0.0008
Aluminum	0.012	0.006
Oil and grease	0.02	0.02
Suspended solids	0.03	0.024
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 141**  
**Continuous rod casting contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.198	0.082
Aluminum	1.185	0.526
Oil and grease	1.939	1.939
Suspended solids	2.909	2.327
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 142**  
**Solution heat treatment contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.754	0.306
Cyanide	0.408	0.163
Zinc	2.08	0.856
Aluminum	12.45	5.52
Oil and grease	20.37	20.37
Suspended solids	30.56	24.45
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 143**  
**Cleaning or etching bath**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.016
Zinc	0.183	0.075
Aluminum	1.094	0.485
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

Table 144  
Cleaning or etching rinse and hot water seal  
NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.515	0.209
Cyanide	0.278	0.111
Zinc	1.42	0.584
Aluminum	8.50	3.77
Oil and grease	13.91	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

Table 145  
Cleaning or etching scrubber liquor  
NSPS

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.715	0.290
Cyanide	0.387	0.155
Zinc	1.97	0.812
Aluminum	11.81	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.55 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

Table 146  
Core operation  
PSES

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.022	0.009
Cyanide	0.015	0.006
Zinc	0.073	0.031
TTO	0.035	
Oil and grease (alternate monitoring parameter)	2.6	1.3

**Table 147**  
**Continuous rod casting lubricant**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.0012
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.10	0.052

**Table 148**  
**Continuous rod casting contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.035
Cyanide	0.057	0.023
Zinc	0.283	0.118
TTO	0.133	
Oil and grease (alternate monitoring parameter)	10.00	5.10

**Table 149**  
**Solution heat treatment contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.396	0.367
Cyanide	0.591	0.245
Zinc	2.98	1.24
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 150**  
**Cleaning or etching bath**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.033
Cyanide	0.052	0.022
Zinc	0.262	0.109
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

**Table 151**  
**Cleaning or etching rinse and hot water seal**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.17
Zinc	2.03	0.85
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

**Table 152**  
**Cleaning or etching scrubber liquor**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.851	0.348
Cyanide	0.561	0.232
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.56 Pretreatment standards for new sources.** Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

**Table 153**  
**Core operation**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with neat oils	
Chromium	0.019	0.008
Cyanide	0.010	0.004
Zinc	0.051	0.021
TTO	0.035	
Oil and grease (alternate monitoring parameter)	0.50	0.50

**Table 154**  
**Continuous rod casting lubricant**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0007	0.0003
Cyanide	0.0004	0.0002
Zinc	0.0020	0.0008
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.020	0.020

**Table 155**  
**Continuous rod casting contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.198	0.082
TTO	0.134	
Oil and grease (alternate monitoring parameter)	1.94	1.94

**Table 156**  
**Solution heat treatment contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.306
Cyanide	0.41	0.163
Zinc	2.08	0.856
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

**Table 157**  
**Cleaning or etching bath**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

**Table 158**  
**Cleaning or etching rinse and hot water seal**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

**Table 159**  
**Cleaning or etching scrubber liquor**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.29
Cyanide	0.39	0.16
Zinc	1.97	0.812
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

### **Subchapter VI — The Drawing With Emulsions or Soaps** **Subcategory**

**NR 257.60 Applicability;** description of the drawing with emulsions or soaps subcategory. This subchapter applies to the discharge of pollutants to waters of the state and the introduction of pollutants into POTWs from core and ancillary drawing with emulsions or soaps operations.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.61 Specialized definitions.** In addition to the definitions set forth in s. NR 257.03, the following definitions apply to the terms used in this subchapter:

(1) "Ancillary operation" means any operation which is not a core operation but which is performed on-site following or preceding the drawing operation, such as continuous rod casting, solution heat treatment, and cleaning or etching.

(2) "Core operation" means drawing with emulsions or soaps, stationary casting, artificial aging, annealing, degreasing, sawing, and swaging.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.62 Effluent limitations** representing the degree of effluent limitations attainable by application of the best practicable control technology currently available. Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BPT:

**Table 160**  
**Core operation**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.205	0.084
Cyanide	0.135	0.056
Zinc	0.680	0.285
Aluminum	3.00	1.50
Oil and grease	9.33	5.60
Suspended solids	19.12	9.10
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 161**  
**Continuous rod casting spent lubricant**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.001
Aluminum	0.013	0.007
Oil and grease	0.040	0.024
Suspended solids	0.081	0.039
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 162**  
**Continuous rod casting contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cast	
Chromium	0.684	0.28
Cyanide	0.450	0.187
Zinc	2.27	0.949
Aluminum	10.00	4.976
Oil and grease	31.10	18.66
Suspended solids	63.76	30.323
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 163**  
**Solution heat treatment contact cooling water**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	3.39	1.39
Cyanide	2.24	0.93
Zinc	11.25	4.70
Aluminum	49.55	24.66
Oil and grease	154.10	92.46
Suspended solids	315.91	150.25
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 164**  
**Cleaning or etching bath**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.109
Aluminum	1.15	0.573
Oil and grease	3.58	2.15
Suspended solids	7.34	3.49
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 165**  
**Cleaning or etching rinse and hot water seal**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	6.12	2.51
Cyanide	4.04	1.67
Zinc	20.31	8.49
Aluminum	89.46	44.519
Oil and grease	278.24	166.95
Suspended solids	570.39	271.29
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 166**  
**Cleaning or etching scrubber liquor**  
**BPT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	7.00	2.86
Cyanide	4.61	1.91
Zinc	23.22	9.70
Aluminum	102.24	50.88
Oil and grease	313.00	190.80
Suspended solids	651.90	310.05
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.63 Effluent limitations representing the degree of effluent reduction attainable by the application of best available technology economically achievable. Except as provided in 40 C.F.R. ss. 125.30 to 125.32, any existing point source subject to this subchapter shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of BAT:

**Table 167**  
**Core operation**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.205	0.084
Cyanide	0.135	0.056
Zinc	0.681	0.285
Aluminum	3.00	1.49

**Table 168**  
**Continuous rod casting spent lubricant**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.0012
Aluminum	0.013	0.0063

**Table 169**  
**Continuous rod casting contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.035
Cyanide	0.056	0.024
Zinc	0.283	0.118
Aluminum	1.25	0.62

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**Table 170**  
**Solution heat treatment contact cooling water**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.897	0.37
Cyanide	0.591	0.25
Zinc	2.98	1.24
Aluminum	13.10	6.52

**Table 171**  
**Cleaning or etching bath**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.11
Aluminum	1.15	0.57

**Table 172**  
**Cleaning or etching rinse and hot water seal**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.167
Zinc	2.03	0.849
Aluminum	8.95	4.45

**Table 173**  
**Cleaning or etching scrubber liquor**  
**BAT**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.85	0.348
Cyanide	0.561	0.232
Zinc	2.82	1.18
Aluminum	12.43	6.19

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.64 New source performance standards. Any new source subject to this subchapter shall achieve the following performance standards:

**Table 174**  
**Core operation**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.173	0.070
Cyanide	0.094	0.038
Zinc	0.476	0.196
Aluminum	2.85	1.27
Oil and grease	4.67	4.67
Suspended solids	7.00	5.60
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 175**  
**Continuous rod casting spent lubricant**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0008	0.0003
Cyanide	0.0004	0.0002
Zinc	0.0020	0.0008
Aluminum	0.012	0.0053
Oil and grease	0.020	0.020
Suspended solids	0.030	0.024
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 176**  
**Continuous rod casting contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.193	0.081
Aluminum	1.184	0.526
Oil and grease	1.940	1.940
Suspended solids	2.91	2.33
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 177**  
**Solution heat treatment contact cooling water**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.754	0.31
Cyanide	0.408	0.16
Zinc	2.08	0.86
Aluminum	12.450	5.52
Oil and grease	20.00	20.37
Suspended solids	20.56	24.45
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 178**  
**Cleaning or etching bath**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.066	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
Aluminum	1.094	0.49
Oil and grease	1.79	1.79
Suspended solids	2.69	2.15
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 179**  
**Cleaning or etching rinse and hot water seal**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.515	0.21
Cyanide	0.278	0.11
Zinc	1.42	0.59
Aluminum	8.50	3.77
Oil and grease	13.911	13.91
Suspended solids	20.87	16.70
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

**Table 180**  
**Cleaning or etching scrubber liquor**  
**NSPS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.72	0.290
Cyanide	0.987	0.155
Zinc	1.97	0.812
Aluminum	1.18	5.24
Oil and grease	19.33	19.33
Suspended solids	29.00	23.20
pH	(1)	(1)

<sup>1</sup> Within the range of 7.0 to 10 at all times.

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

NR 257.65 Pretreatment standards for existing sources. Except as provided in ss. NR 211.13 and 211.14, any existing source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for existing sources:

**Table 181**  
**Core operation**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.205	0.084
Cyanide	0.135	0.056
Zinc	0.681	0.285
TTO	0.32	
Oil and grease (alternate monitoring parameter)	25.0	12.0

**Table 182**  
**Continuous rod casting lubricant**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0009	0.0004
Cyanide	0.0006	0.0003
Zinc	0.0029	0.0012
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.10	0.052

**Table 183**  
**Continuous rod casting contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.086	0.085
Cyanide	0.056	0.024
Zinc	0.283	0.119
TTO	0.134	
Oil and grease (alternate monitoring parameter)	10.0	5.1

**Table 184**  
**Solution heat treatment contact cooling water**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.896	0.367
Cyanide	0.591	0.245
Zinc	2.98	1.25
TTO	1.41	
Oil and grease (alternate monitoring parameter)	110.0	53.0

**Table 185**  
**Cleaning or etching bath**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.079	0.032
Cyanide	0.052	0.022
Zinc	0.262	0.11
TTO	0.124	
Oil and grease (alternate monitoring parameter)	9.30	4.70

**Table 186**  
**Cleaning or etching rinse and hot water seal**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.612	0.251
Cyanide	0.404	0.167
Zinc	2.03	0.849
TTO	0.96	
Oil and grease (alternate monitoring parameter)	73.0	36.0

**Table 187**  
**Cleaning or etching scrubber liquor**  
**PSES**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.351	0.348
Cyanide	0.561	0.232
Zinc	2.82	1.18
TTO	1.34	
Oil and grease (alternate monitoring parameter)	100.0	50.0

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

**NR 257.66 Pretreatment standards for new sources.** Except as provided in s. NR 211.13, any new source subject to this subchapter which introduces pollutants into a POTW shall comply with ch. NR 211 and achieve the following pretreatment standards for new sources:

**Table 188**  
**Core operation**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum drawn with emulsions or soaps	
Chromium	0.173	0.070
Cyanide	0.094	0.038
Zinc	0.48	0.196
TTO	0.32	
Oil and grease (alternate monitoring parameter)	4.67	4.67

**Table 189**  
**Continuous rod casting lubricant**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.0008	0.0003
Cyanide	0.0004	0.0002
Zinc	0.0020	0.0008
TTO	0.0014	
Oil and grease (alternate monitoring parameter)	0.020	0.020

**Table 190**  
**Continuous rod casting contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum rod cast	
Chromium	0.072	0.029
Cyanide	0.039	0.016
Zinc	0.198	0.082
TTO	0.134	
Oil and grease (alternate monitoring parameter)	1.94	1.94

**Table 191**  
**Solution heat treatment contact cooling water**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum quenched	
Chromium	0.76	0.306
Cyanide	0.41	0.163
Zinc	2.08	0.856
TTO	1.41	
Oil and grease (alternate monitoring parameter)	20.37	20.37

**Table 192**  
**Cleaning or etching bath**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.067	0.027
Cyanide	0.036	0.015
Zinc	0.183	0.075
TTO	0.124	
Oil and grease (alternate monitoring parameter)	1.79	1.79

**Table 193**  
**Cleaning or etching rinse and hot water seal**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.52	0.21
Cyanide	0.28	0.11
Zinc	1.42	0.59
TTO	0.96	
Oil and grease (alternate monitoring parameter)	13.91	13.91

**Table 194**  
**Cleaning or etching scrubber**  
**PSNS**

Pollutant or pollutant property	Maximum for any 1 day	Maximum for monthly average
	mg/off-kg (lb/million off-lbs) of aluminum cleaned or etched	
Chromium	0.715	0.290
Cyanide	0.387	0.155
Zinc	1.97	0.812
TTO	1.34	
Oil and grease (alternate monitoring parameter)	19.33	19.33

History: Cr. Register, November, 1989, No. 407, eff. 12-1-89.

Note: The Wisconsin administrative code corresponds to the code of federal regulations according to the following table:

State Code	Corresponding Federal Regulation
s. NR 205.03	40 C.F.R. s. 401.11
s. NR 205.04	40 C.F.R. s. 401.11
ch. NR 211	40 C.F.R. Part 403
s. NR 211.03	40 C.F.R. s. 403.3
s. NR 211.13	40 C.F.R. s. 403.7
s. NR 211.14	40 C.F.R. s. 403.13
ch. NR 257	40 C.F.R. Part 467